

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILIN	IG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKE	T NO. CONFIRMATION NO.
10/726,945	12/	02/2003	Miguel A. Perez		5348
25859	7590	04/18/2006			EXAMINER
WEI TE CI			LE	LEE, CHUN KUAN	
	INTERNAT DREX DRIV	IONAL, INC. E		ART UNIT	PAPER NUMBER
SANTA CL				2181	
				DATE MAILED: 04/	18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/726,945	PEREZ ET AL.
Office Action Summary	Examiner	Art Unit
	Chun-Kuan (Mike) Lee	2181
The MAILING DATE of this communication appeared Period for Reply	rs on the cover sheet with	the correspondence address -
A SHORTENED STATUTORY PERIOD FOR REPLY I WHICHEVER IS LONGER, FROM THE MAILING DAT - Extensions of time may be available under the provisions of 37 CFR 1.136(after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will a Failure to reply within the set or extended period for reply will, by statute, ca Arry reply received by the Office later than three months after the mailing date armed patent term adjustment. See 37 CFR 1.704(b).	E OF THIS COMMUNICA a). In no event, however, may a repl apply and will expire SIX (6) MONTH use the application to become ABAN	ATION. y be timely filed S from the mailing date of this communication IDONED (35 U.S.C. § 133).
Status		
1)⊠ Responsive to communication(s) filed on <u>23 January</u> 2a)⊠ This action is FINAL. 2b)□ This action is application is in condition for allowance closed in accordance with the practice under Explanation.	ction is non-final. e except for formal matter	•
Disposition of Claims		
 4)⊠ Claim(s) 1-11 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn 5)□ Claim(s) is/are allowed. 6)⊠ Claim(s) 1-11 is/are rejected. 7)□ Claim(s) is/are objected to. 8)□ Claim(s) are subject to restriction and/or expressions. 		
Application Papers		
9)☐ The specification is objected to by the Examiner. 10)☒ The drawing(s) filed on <u>02 December 2003</u> is/are		•
Applicant may not request that any objection to the dra Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Exam	is required if the drawing(s)	,
Replacement drawing sheet(s) including the correction	is required if the drawing(s)	·
Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Example 11.	n is required if the drawing(s) niner. Note the attached (riority under 35 U.S.C. § 1 nave been received. nave been received in Appropriate the comments have been received.	Office Action or form PTO-152. 19(a)-(d) or (f). Dication No Exercised in this National Stage
Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Exam Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign properties a) All b) Some * c) None of: 1. Certified copies of the priority documents here. 2. Certified copies of the priority documents here. 3. Copies of the certified copies of the priority application from the International Bureau (n is required if the drawing(s) niner. Note the attached (riority under 35 U.S.C. § 1 nave been received. nave been received in Appropriate the comments have been received.	Office Action or form PTO-152. 19(a)-(d) or (f). Dication No Exercised in this National Stage
Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Exam Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign properties a) All b) Some * c) None of: 1. Certified copies of the priority documents here. 2. Certified copies of the priority documents here. 3. Copies of the certified copies of the priority application from the International Bureau (n is required if the drawing(s) niner. Note the attached (riority under 35 U.S.C. § 1 nave been received. nave been received in Appropriate the comments have been received.	Diffice Action or form PTO-152. 19(a)-(d) or (f). Discation No Ecceived in this National Stage Ceived. FRITZ FLEMING. PRIMARY EXAMINER GEORGE 444681

Application/Control Number: 10/726,945 Page 2

Art Unit: 2181

DETAILED ACTION

Response to Arguments

- 1. Applicant's arguments with respect to claims 1-7, filed on 01/23/2006, have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments of claim 8 have been fully considered but they are not persuasive. New claims 9-11 are added and claims 1-11 are currently pending for examination.
- 2. In responding to applicant's argument that <u>Richter</u> does not teach said first component along with the first adapter and said second component along with the second adapter are mutually exclusively assembled with the circuit board, as stated on page 5, lines 16-24 (5th paragraph). The argument have been fully considered but is not found to be persuasive.

Richter teaches that the first component (ATA Drives 114, 115 of Fig. 1B) is mutually exclusive with the second component (PCMCIA expansion board 178 of Fig. 1B coupling to the PCMCIA cards 122, 123 of Fig. 1B), the first adapter (Fig. 1B, ref. 110, 163, 134, 135) is mutually exclusive with the second adapter (Fig. 1B, ref 170, 133, 172), therefore the assembling of the first component along with the first adapter with the circuit board (Fig. 1B, ref. 100) and the assembling of the second component along with the second adapter with the circuit board would be mutually exclusively assembled. The examiner reiterates his rejection of claim 8 in detail below.

Application/Control Number: 10/726,945 Page 3

Art Unit: 2181

identification/description is indefinite.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9 and 11 contain the trademark/trade name PCI-Express. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe an electronic component conforming to the PCI-Express standard and, accordingly, the

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 4. Claims 1-5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Richter et al. (US Patent 5,727,184).
- 5. As per claim 1, <u>Richter</u> teaches a computer interconnecting system method comprising:

Art Unit: 2181

a circuit board (motherboard 100 of Fig. 5) comprising a first interface (Fig. 5, ref. 146) compatible with at least two signal transmission standards (ATA standard and PCMCIA standard) (Abstract and Fig. 5);

Page 4

a electronic component (Fig. 5, ref. 114-115, 122-123, 222-223, 218) having a second interface (Fig. 5, ref. 134, 135, 537) conforming to one of the at least two standards (Abstract and Fig. 5); and

a translation adapter (Fig. 5, ref, 108, 502, 504) interchangeable corresponding to the one of the at least two standards, the translation adapter interconnecting the circuit board and the electronic component, wherein the translation adapter having a board-mating interface (Fig. 5, ref. 146) interfacing with the first interface and a component-mating interface (Fig. 5, ref. 132, 533) interfacing with the second interface (Fig. 5), wherein it is well known to one skilled in the art that an expansion board (Fig. 5, ref, 108, 502, 504) is interchangeable by removing and replacing with another expansion board.

6. As per claims 2, <u>Richter</u> teaches all the limitations of claim 1 as discussed above. <u>Richter</u> further teaches that the circuit board comprises of a plurality of electronic elements (chips and integrated circuit) arrange thereon (Fig. 5 and col. 4, II. 60-66), wherein the chips and integrated circuit are required electronic components utilized to implement the motherboard.

Art Unit: 2181

Page 5

7. As per claim 3, <u>Richter</u> teaches all the limitations of claim 2 as discussed above. <u>Richter</u> further teaches wherein the circuit board defines a mating side (Fig. 5, ref. 146) and has plurality of Input/Output connectors arranged along the mating side (Abstract and Fig. 5), wherein the motherboard is required have the mating slot comprising of a plurality of input/output connectors in order for the expansion board to be inserted and connected to the motherboard

- 8. As per claim 4, <u>Richter</u> teaches all the limitations of claim 1 as discussed above. <u>Richter</u> further teaches the electronic component is an electrical card (PCMCIA card 122-123, 222-223 of Fig. 5).
- 9. As per claim 5, <u>Richter</u> teaches all the limitations of claim 1 as discussed above. <u>Richter</u> further teaches the translation adapter comprise a first connector having the board-mating interface (Fig. 5, ref. 146), a second connector having the component-mating interface (Fig. 5, ref.132, 533) and a board (expansion board 502 of Fig. 5) interconnecting the first and second connectors.
- 10. As per claim 8, Richter teaches an interconnect system method comprising:
 a circuit board (Fig. 1B, ref. 100) defining a base interface thereof (Fig. 1B);
 a first (Fig. 1B, ref. 114, 115) and a second (Fig. 1B, ref. 122, 123) electronic
 component different from each other and respectively defining different first (Fig. 1B, ref. 134, 135) and second (Fig. 1B, ref. 172) interfaces thereof (Fig. 1B);

first (Fig. 1B, ref. 110, 132, 134, 135) and second (Fig. 1B, ref. 133, 170, 173) adapters different from each other, the first adapter defining a board-mating interface (Fig. 1B, ref. 132) adapted to be mated with the base interface and a first component-mating interface (Fig. 1B, ref. 134, 135) opposite to said board-mating interface and adapted to be mated with the first interface, and the second adapter defining another board-mating interface (Fig. 1B, ref. 133) similar to said board-mating interface and a second component-mating interface (Fig. 1B, ref. 172) opposite to said another board-mating interface and adapted to be mated with the second interface, said first component-mating interface being different from said second component-mating interface (Figure 1B); and

wherein said first component along with the first adapter and said second component along with the second adapter are mutually exclusively assembled with the circuit board (Figure 1B).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Richter</u> et al. (US Patent 5,727,184) in view of "<u>Diamond Monster Sound MX300 Review</u>".

Art Unit: 2181

<u>Richter</u> teaches all the limitation of claim 1 as discussed above. <u>Richter</u> further teaches that the circuit board may be a single interface expansion board (Abstract).

Richter does not expressly teach that the interface expansion board has plurality of golden fingers forming the first interface.

"<u>Diamond Monster Sound MX300 Review</u>" teaches that the expansion board has a plurality of golden-plated connectors forming the interface (MX300 soundcard Figure and 1st paragraph).

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include <u>Diamond Monster Sound MX300 Review</u>'s golden-plated connectors into <u>Richter</u>'s circuit board interface.

Therefore, it would have been obvious to combine "<u>Diamond Monster Sound</u>

<u>MX300 Review</u>" with <u>Richter</u> for the benefit of implementing better signal connectors as it is an well known knowledge that gold plated connectors conduct signal better.

12. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter et al. (US Patent 5,727,184) in view of the "PCMCIA Announces Development of New Expansion Card Technology for Mobile and Desktop PCs".

Richter does not expressly teach the interconnecting system assembly wherein the electronic component is a PCI card, a PCI-Express card and a NewCard.

"PCMCIA Announces Development of New Expansion Card Technology for

Mobile and Desktop PCs" teaches an expansion card coupling to the mobile and

desktop personal computers (PCs) comprising a NEWCARD, wherein the NEWCARD

Art Unit: 2181

conforms to the PCI Express standard, and wherein it is well known that PCI Express standard is a derivation of the PCI standard.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include PCMCIA Announces Development of New Expansion

Card Technology for Mobile and Desktop PCs' NEWCARD conforming to the PCI standard into Richter's interconnecting system assembly. The resulting combination of the references teaches the interconnecting system assembly to further comprising wherein the electronic components comprising a NEWCARD conforming to standards comprising the PCI standard and the PCI Express standard.

Therefore, it would have been obvious to combine "PCMCIA Announces

Development of New Expansion Card Technology for Mobile and Desktop PCs" with

Richter for the benefit of increasing speed of data transfer, reducing costs and supporting advanced serial I/O technologies ("PCMCIA Announces Development of New Expansion Card Technology for Mobile and Desktop PCs" on page 1).

Art Unit: 2181

Conclusion

Page 9

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun-Kuan (Mike) Lee whose telephone number is (571) 272-0671. The examiner can normally be reached on 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz M. Fleming can be reached on (571) 272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2181

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.K.L. 04/03/2006 Supervisory FRITZ FLEMING
PRIMARY EXAMINER AU2181
GROUP 2100 4/14/2006